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**Device for carrying a child****Technical field**

The invention relates to a device for carrying a child in seated position upon the shoulders of an adult. The device comprises a seat section partly encircling the neck of the adult, and a leg section reaching down over the chest of the adult.

**Background Art**

Children and infants are often carried by adults, normally their parents, where the child is seated upon the shoulders of the adult. The most common way of doing this is by the adult holding on to the child's hands or for an older child on to his feet. Numerous devices have been described whereby children can be carried by a large person such as parent or other adult. One type of carrier is designed to carry the child papoose-style on the back of the adult, employing devices similar to camper's backpacks. The papoose-style carrier is well suited for carrying infants for a relatively long period of time. For older children, who need to be carried for a shorter period of time or need a better viewing position, a shoulder-mounted carrier is preferable.

In U.S. Patent No. 4.915.277 a holder with a saddle seat is positioned against the adult's upper thigh. In U.S. Patents No. 3.968.910, 4.416.403 and 4.484.700 a shoulder mounted seats for infants and children are described. The design enables the child to be seated upon the shoulder of the adult with his legs straddling the adult's neck and extending downwardly upon the chest region of the adult. Those seats are designed of collapsible structure enabling easy carrying when not in use. In U.S. Patent NO. 5.335.834 a carrying seat is introduced, comprising an integral inflatable structure fabricated of flexible polymeric sheet material. The carrying seat is made of a main portion of a horseshoe or U-shaped contour, having an

inflation valve, an arcuate rear region, opposed leg portions forwardly disposed from said rear region, and upper and lower surfaces. An abutment member is upwardly emergent from said upper surface in said region adjacent to said interior seam. The carrying seat is of substantially symmetrical shape with respect to plane orthogonal to said upper and lower surface and bisecting said rear portion in parallel relationship to said leg portions.

The design as introduced in U.S. Patent No. 5,335,834 is in many ways advantageous over its prior art, however there are still many disadvantages employed with its use. The two main disadvantages are that the seat section does not support the correct upright sitting posture of the child and secondly that the weight of the child is not correctly carried by the adult.

Extension of the lumbar spine is believed to be beneficial as compared to flexion of the lumbar spine as a result in lower intradiscal pressure. The natural upright curvature of the spine can only be adopted when the pelvis is in the neutral or slightly anterior tilted position. Research has indicated that forward inclination of seats between 4-10° (degrees) ensure adequate extension of the lumbar spine through anterior tilting of the pelvis. Furthermore, increased lumbar extension has as an added effect that the thoracic spine becomes more vertical which in turn can enhance breathing.

### **Disclosure of the Invention**

The object of the invention is to provide a device for carrying a child in seated position upon the shoulder of an adult where a correct upright sitting position of the child is encouraged and the weight support of the adult is carried as correctly and ergonomically as possible by the adult.

The device according to the invention comprises a configuration for carrying a child upon the shoulder of an adult where a seat section partly encircles the neck of the adult and a leg section reaching down over the chest of the adult, characterized in said seat section being a cushion saddle and the leg

section having stirrups for the child's feet, said stirrups carrying at least partly the child's weight.

The invention is further unique according to the characteristic part of the patent claims 2-6.

### Brief Description of the Drawings

The invention is explained in greater details below with reference to the accompanying drawings in which;

Figure 1 shows a front side view of the device,

Figure 2 shows a side view of the device,

Figure 3 shows a cross sectional cut A - A from fig. 1,

Figure 4 shows a child seated upon the shoulder of an adult using the shoulder seat device, and

Figure 5 shows a child seated upon the shoulder of an adult without the support of the device.

### More detailed Description of the Drawings and one presently preferred exemplary embodiment of the invention

The seat configuration as illustrated in figure 1 - 3 is comprised of an inflatable main portion (21), forming the seat for carrying the child. The main portion of the device or the so-called seat section (21) is preferably made of any kind of flexible sheet material. The material is preferably sewed and/or welded together to form an inflatable main portion. The seat section (21) has a horseshoe-like or semi-circular contour. The leg sections (22) extend from the non-inflatable end portion (7) of the seat section (21) and form a

kind of stirrups (12) for the child to place its feet in. The seat section's inner part (5) forms about or little more than 3/4 of enclosed circle. Thereby the device partly encircles the neck of the adult when in use. The leg section is secured to the non-inflatable end portion (7) of the seat section by metal eye (8) where the upper strap (9) portion of the leg section is fastened to. The length of the leg section is adjustable by strap length adjuster's (10) allowing individual adjustments for the optimal comfort for the child and the adult carrying the child. A footrest or stirrups (12) are arranged at the end of the leg section. The stirrups are connected to the length adjuster's (10) by lower straps (11).

In figure 4 - 5 the sitting posture of a child seated upon the shoulder of an adult (25) is illustrated. In figure 4 the child (24) is supported by the cushion saddle seat (1) and is situated in a correct upright position with his back spine (26) as close as possible to a vertical alignment.

Figure 5 illustrates the typical sitting posture of a child (24) seated upon the shoulder of an adult (25) having no support. The child's back spine is curved and the sitting position is abnormal. The two figures illustrate clearly the difference in the sitting posture of a child with or without the aid of the cushion saddle seat. By using the device the sitting posture of the child (24) will be much more natural and ergonomic as well as it is much easier for the adult (25) to carry the child.

The invention described here above is not limited to precisely those details which have been specified, but can be elaborated upon in many ways without deviating from the central concept and spirit of the invention as defined in the patent claims below.